Title: "Mapping and Caching of Uniform Resource Locators for Surrogate Web Server"
Inventor: H. Fischer
Docket No.: 36584-6051



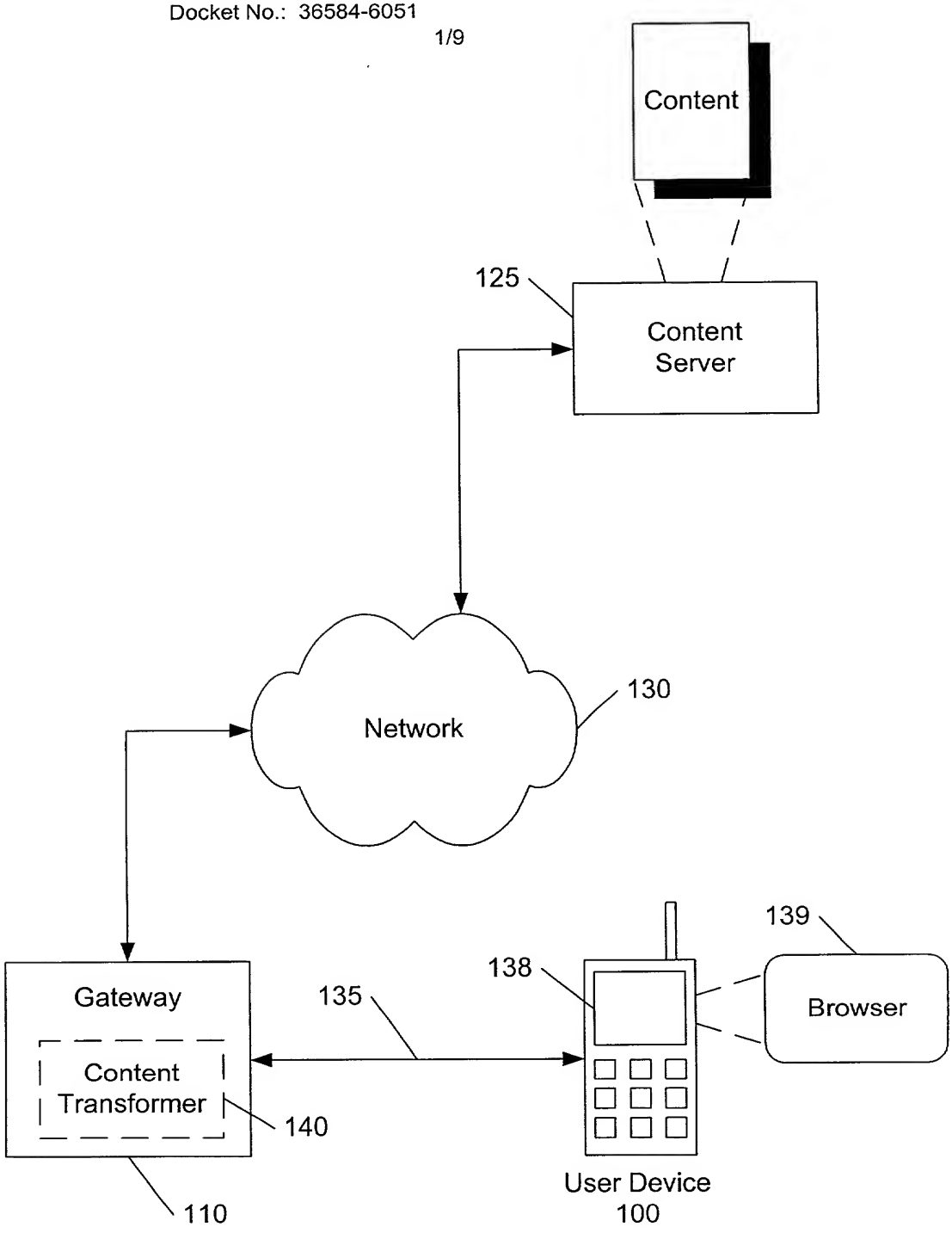


Figure 1

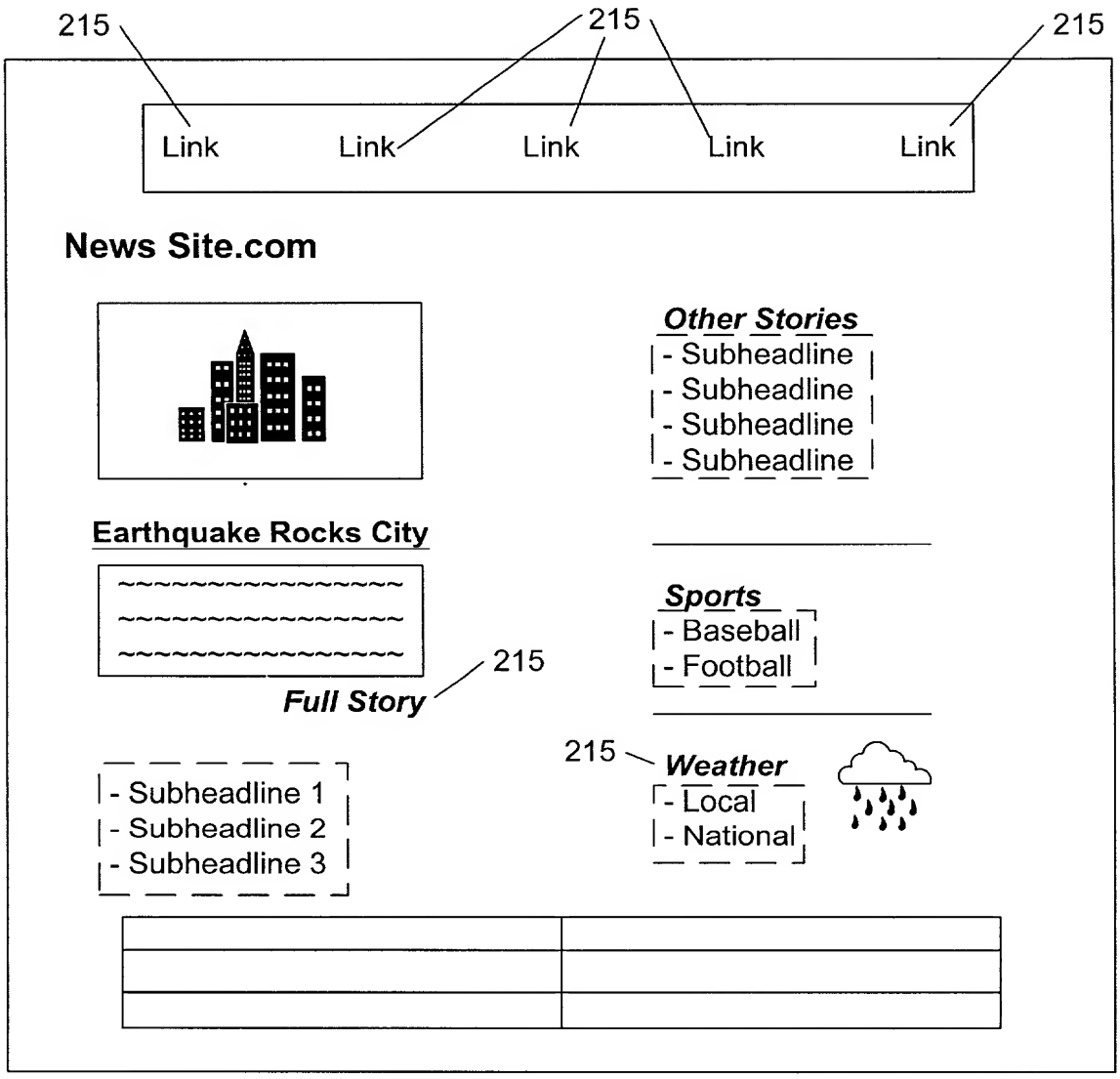
215
215
215
Link
Link
Link
Link
Link
News Site.com
Other Stories
- Subheadline
- Subheadline
- Subheadline
- Subheadline
Earthquake Rocks City
Full Story
215
Sports
- Baseball
- Football
215
Weather
- Local
- National
- Subheadline 1
- Subheadline 2
- Subheadline 3

Figure 2

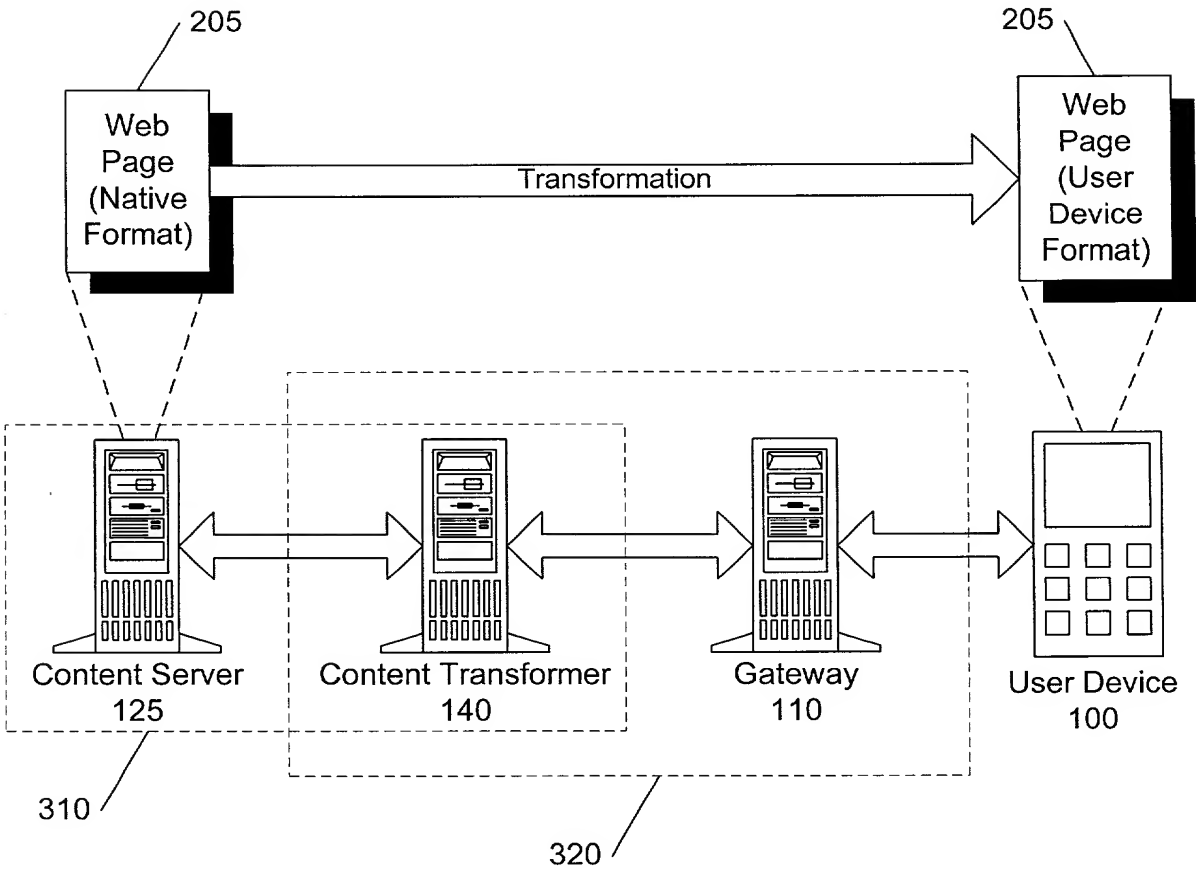
205
205
Web Page (Native Format)
Transformation
Web Page (User Device Format)
Content Server 125
Content Transformer 140
Gateway 110
User Device 100
310
320

Figure 3

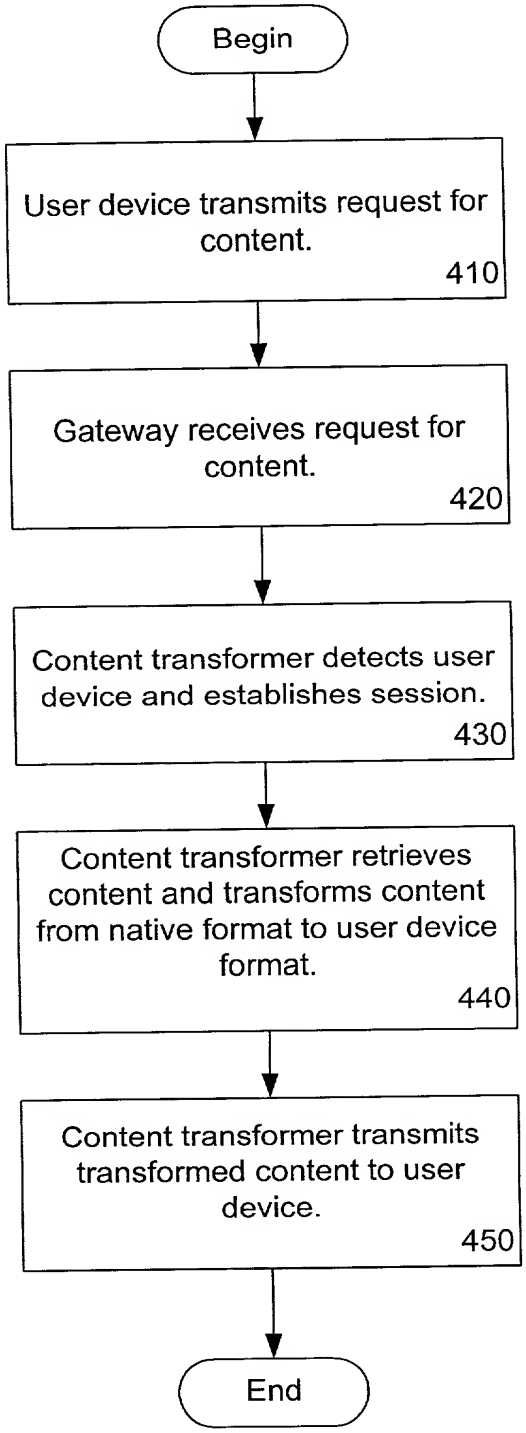
Begin
User device transmits request for content.
410
Gateway receives request for content.
420
Content transformer detects user device and establishes session.
430
Content transformer retrieves content and transforms content from native format to user device format.
440
Content transformer transmits transformed content to user device.
450
End

Figure 4

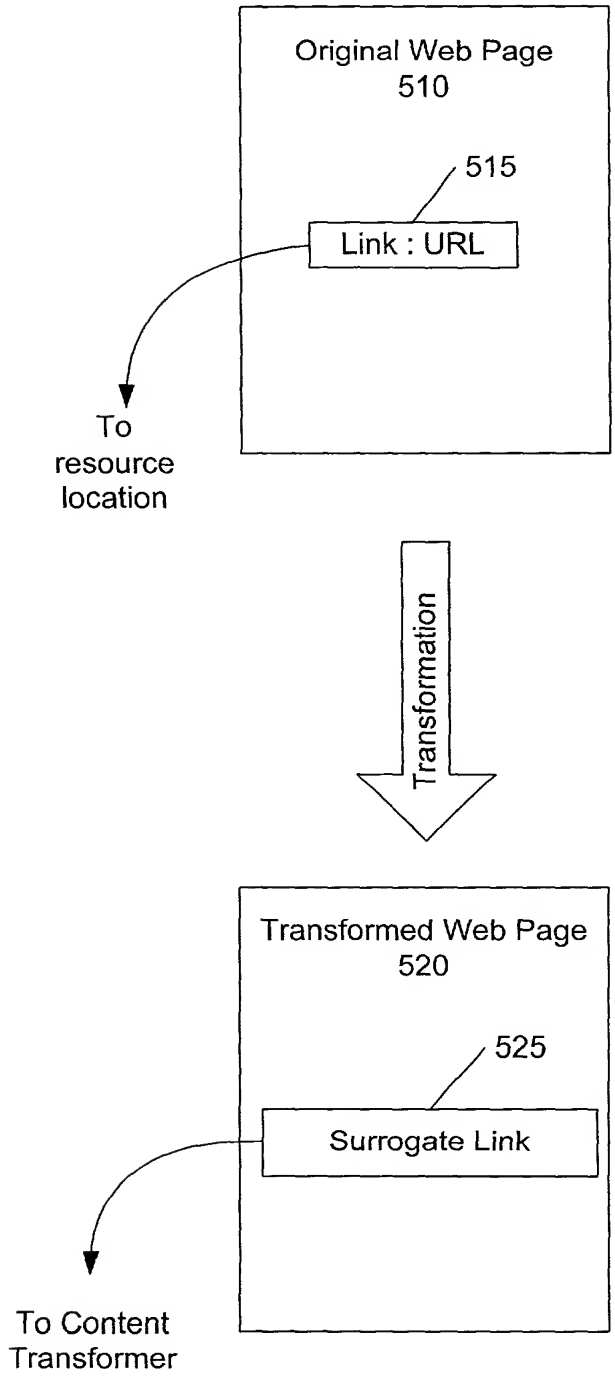
Original Web Page
510
515
Link : URL
To
resource
location
Transformation
Transformed Web Page
520
525
Surrogate Link
To Content
Transformer

Figure 5

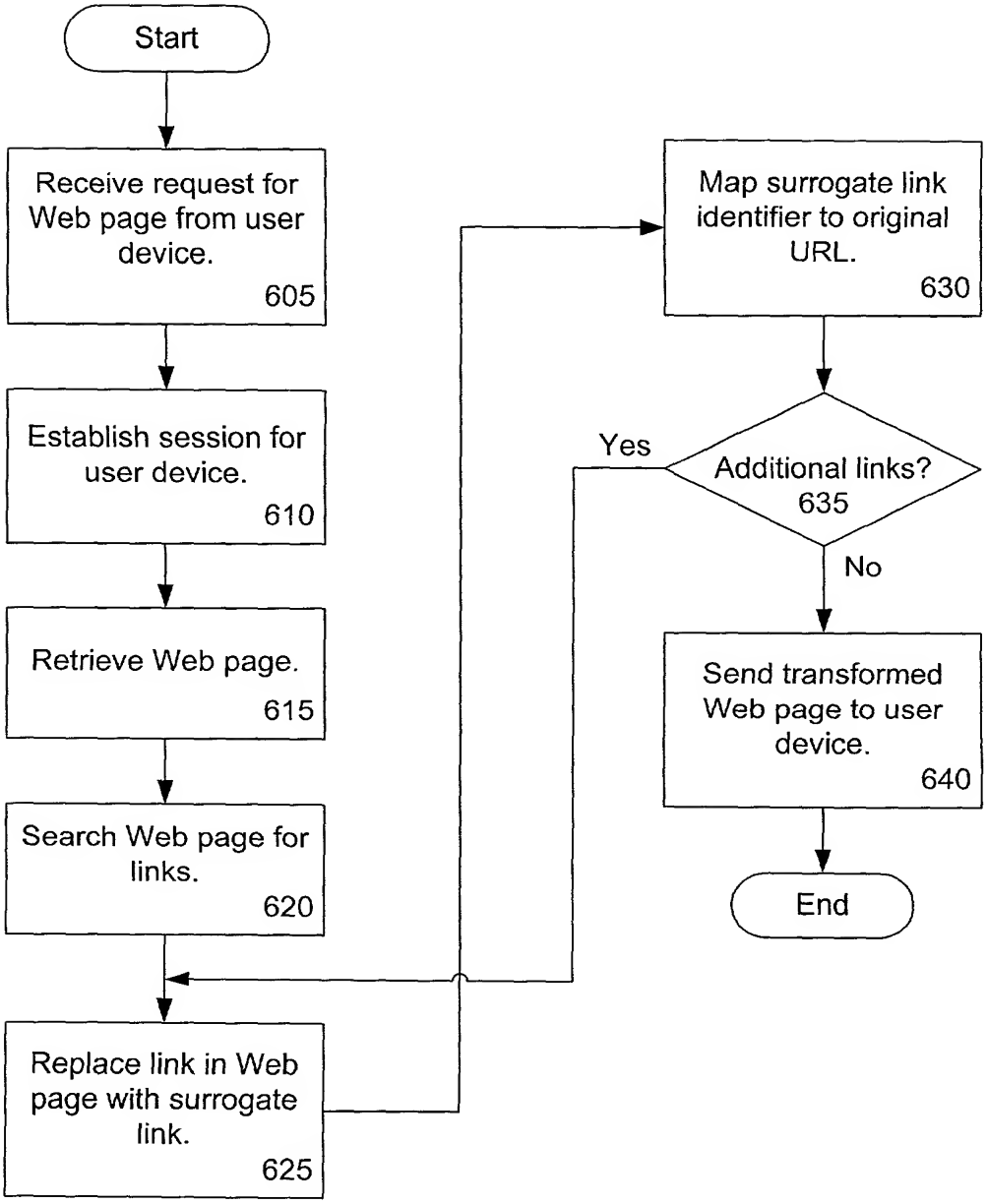
Start
Receive request for Web page from user device.
605
Establish session for user device.
610
Retrieve Web page.
615
Search Web page for links.
620
Replace link in Web page with surrogate link.
625
Map surrogate link identifier to original URL.
630
Additional links?
635
Yes
No
Send transformed Web page to user device.
640
End

Figure 6

710

| Identifier Code | Actual URL |
|---|---|
| 1 | www.mobilewebsurf.com |
| | |
| | |
| | |

Figure 7

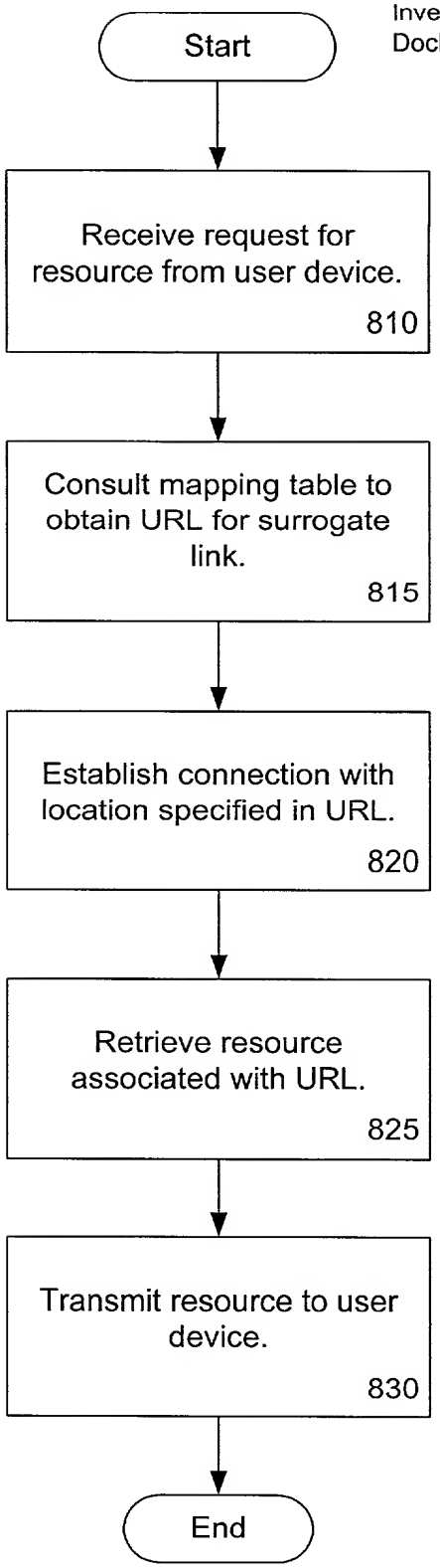
Start
Receive request for resource from user device.
810
Consult mapping table to obtain URL for surrogate link.
815
Establish connection with location specified in URL.
820
Retrieve resource associated with URL.
825
Transmit resource to user device.
830
End

Figure 8

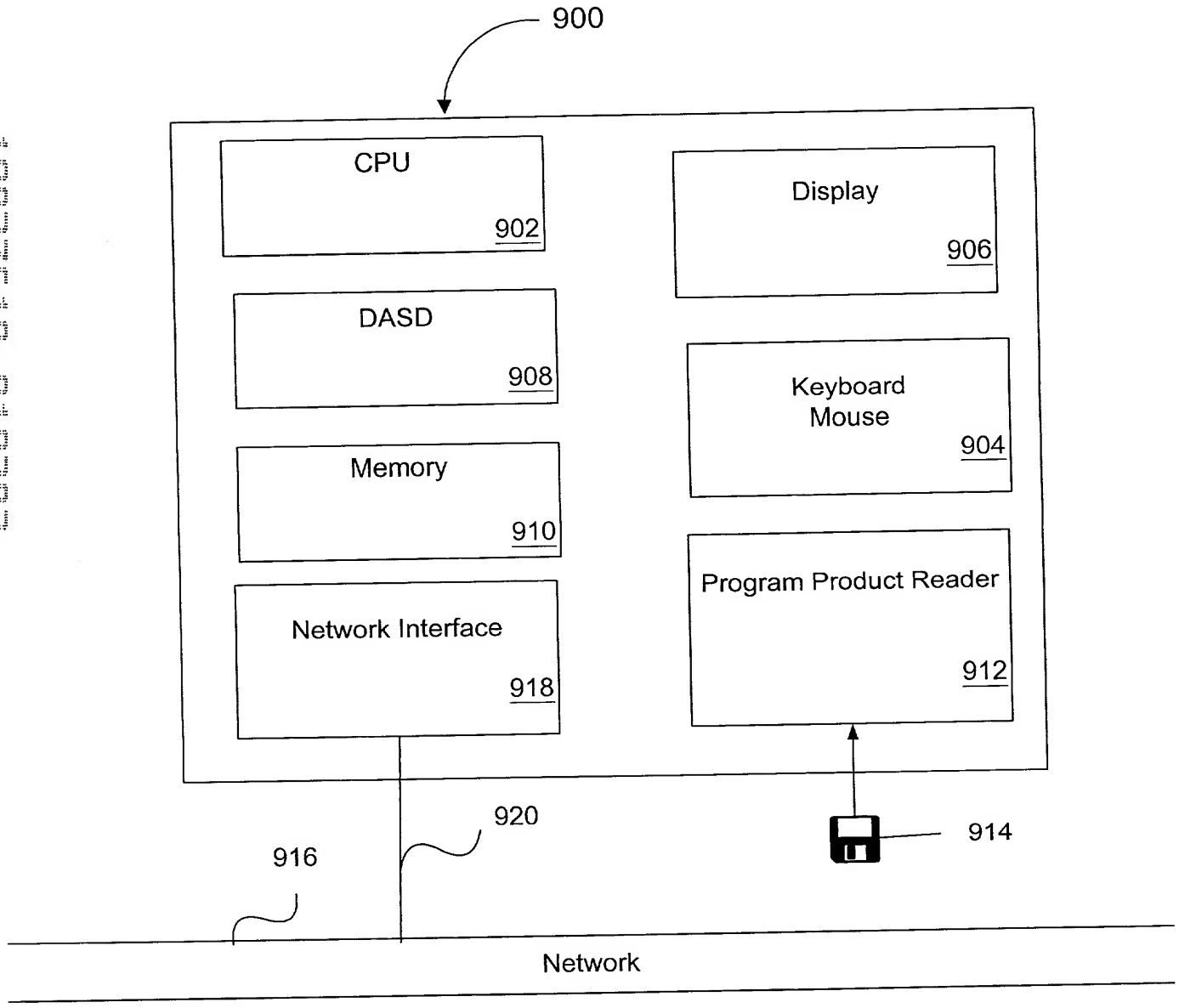
900
CPU
902
Display
906
DASD
908
Keyboard
Mouse
904
Memory
910
Program Product Reader
912
Network Interface
918
920
914
916
Network

Figure 9